

a diameter selected to apply the colored layer 32 over the desired thickness of layer 30. Alternatively, the colored layer 32 could be fabricated as a tube and the clear inner portion 30 applied by extruding it into the central portion of the tube or by other known processes. The resulting article is then heated and drawn to the desired diameter in the range of 6 mm to 9 mm as shown in FIG. 4c. The drawn rod 36 provides the raw stock from which the lenses can be lathe cut by conventional processes.

FIGS. 5a, 5b, and 5c illustrate an alternative method of manufacture. The clear PMMA rod or boule 40 has a diameter substantially greater than the diameter of the finished lens. The boule 40 is then treated with a suitable dye, preferably blue in color, to create a colored outer layer 42, as shown in FIG. 5b, which is effective to reduce the transmission of light from the periphery of the finished lens to the central portion. The resulting article 46 is then heated and drawn to the desired finished diameter as illustrated in FIG. 5c.

FIG. 6 is an enlarged view of the portion of FIG. 5c enclosed with the dotted line. It can be observed that the colored portion 42 is actually a graded region, being darker at the periphery and lighter toward the center of the boule. The range of the gradation can be controlled by the degree of reduction in diameter as the boule is drawn. The greater the degree of reduction in diameter, the sharper the optical gradient as a function of $1/R^2$. This technique can be used to provide the most suitable gradient.

While it is contemplated that the intermediate product of FIGS. 4b and 5b will be the preferred technique for fabrication of the lenses, it is also possible to draw a clear boule to the desired finished diameter and then introduce the dye to form the layer 42.

The preferred embodiments are shown with discrete positioning loops which are attached to the lens. Alternatively, and most preferably, the lens and loops can be

fabricated such as by lathe cutting from a single piece of PMMA or polysulfone having a clear central portion and a colored peripheral portion. Likewise, an intracorneal lens is by lathe cutting.

Full advantages of the invention is obtained when the lens has a clear central portion, and a colored ring or rimmed peripheral portion and colored loops. In some situations it can be desirable to color only the loops or only the edge of the lens. By lathing loops from the colored portion of the rod and lathing the optic from the clear portion of the rod, there is manufactured a single piece lens with colored loops and partially colored optic.

It is claimed:

1. An intraocular lens having a clear central lens portion and a peripheral lens portion, said peripheral lens portion having a reduced, graded transmissivity ranging from lowest at the outer extremity thereof to highest at the junction with said clear central lens portion, said peripheral lens portion extending completely about the periphery of said clear central lens portion.

2. An intraocular lens according to claim 1 including positioning loops attached to the peripheral lens portion.

3. An intraocular lens according to claim 1 including positioning holes in said peripheral portion.

4. An intraocular lens according to claim 1 including radial loop holes in said peripheral portion.

5. An intraocular lens according to claim 2 wherein said reduced transmissivity peripheral portion is colored to substantially reduce edge effect glare.

6. An intraocular lens according to claim 5 wherein said loops are of colored material.

7. An intraocular lens according to claim 5 wherein the colored portion is blue or green.

8. An intraocular lens according to claim 6 wherein the colored material is blue.

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